Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

already been constructed, and within a short time the recording instruments will be in operation. The expedition will remain at Mt. Wilson about three months. GEORGE E. HALE.

SOLAR OBSERVATORY, MT. WILSON, CAL.

WATER SYSTEM FOR THE SOLAR OBSERVATORY.

A pumping-plant, consisting of a triplex pump, driven by a five-horse-power electric motor, a receiving tank of 20,000 gallons capacity, a pipe-line 2,100 feet in length, with a rise of 325 feet, a storage reservoir of 30,000 gallons capacity, a distributing-pipe supplying all the buildings of the observatory, and an electric-power line from the power-house to the pump, is now under construction on Mt. Wilson. It is expected that the system will be in operation within two weeks, though the large reservoir will not be completed until later. A special fire-pump, connected with a 500-gallon tank containing a very effective fire-extinguishing fluid (and also connected with the water reservoir), will afford protection for the Snow telescope-house and the other buildings. GEORGE E. HALE.

SOLAR OBSERVATORY, MT. WILSON, CAL.

ORBITS OF THE SIXTH AND SEVENTH SATELLITES OF *JUPITER*.

The sixth satellite was under observation from December 3, 1904, to March 22, 1905, inclusive, and the seventh satellite from January 2, to March 9, 1905.

The writer computed approximate orbits for both of these satellites, but before entirely satisfactory representations of the observations were secured it was necessary to discontinue this work and prepare for the coming eclipse.

Dr. F. E. Ross, formerly Fellow in the Lick Observatory and now in the Carnegie Institution of Washington, undertook, under the direction of Professor NEWCOMB, the determination of more accurate orbits for these satellites. He has completed the orbit for the sixth satellite, which represents the observations as closely as can be expected. According to this orbit, the sixth satellite is moving about *Jupiter* in the *same direction* as the five inner satellites, and in a period of 242 days. Its eccentricity is considerable, however, amounting to 0.16, and the inclination of its orbit to the plane of *Jupiter's* equator is